

**REMARKS**

The Final Office Action dated April 7, 2004, has been received and reviewed.

Claims 25-34 are currently pending in the above-referenced application. Claims 25-29 stand rejected. Claims 30-34 have been withdrawn from consideration.

Reconsideration of the above-referenced application is respectfully requested.

**Rejections Under 35 U.S.C. § 112, First Paragraph**

Claims 25-29 stand rejected under the first paragraph of 35 U.S.C. § 112 for reciting subject matter for which the originally filed specification purportedly does not provide an adequate written description. Specifically, it has been asserted that the originally filed specification does not provide an adequate written description of a plurality of capture oligonucleotides that are “immobilized site-specifically to substantially all regions of . . . at least one surface [of a waveguide] having a base coating thereon, the base coating being located only on portions of the at least one surface . . .,” as recited in independent claim 25.

A thin film waveguide 103 is shown in Figs. 1A through 2A of the above-referenced application. *See also* page 9, lines 2-6. Binding molecules 106 are immobilized to an upper surface 103A of waveguide 103. *See id.*; *see also* Figs. 1A through 2A. Fig. 1B clearly depicts binding molecules 106 being arranged as strips 104 that extend over regions of upper surface 103A of thin film waveguide 103. *See also* page 10, lines 19-22.

The specification of the above-referenced application, at page 10, lines 20-22, also refers to strips 104 as “waveguide ‘channels.’” In addition, the specification notes, at page 23, lines 3-5, “it is highly desirable that the *channels* be coated with a coating that reduces non-specific binding to 1 % or less of specific binding, prior to covalent immobilization of the specific binding molecules [106].” (Emphasis supplied). Such a coating prevents “cross talk” between adjacent “channels,” or strips 104. *See* page 22, lines 14-29.

An example of such a coating is provided at page 23, lines 6-20, of the specification. The coating is to be selectively applied to the “channels,” or strips 104 to site-specifically immobilize the binding molecules 106 to the “channels,” or strips 104. Page 23, lines 6-7. The example of such a site-specifically immobilizing coating that is provided in the specification includes a

coating with pendant maleimido groups. Page 23, lines 7-20. The specification, at page 23, lines 12-13, reiterates that such a coating is useful for reducing nonspecific binding of analytes to undesired regions of the surface 103A, such as the regions between “channels,” strips 104, or other discrete regions on the surface 103A of the thin film waveguide 103. *See* page 22, lines 14-29.

Therefore, the originally filed specification clearly provides an adequate written description of the subject matter recited in independent claim 25, as well as for the subject matter recited in claims 26-29, each of which depends directly from independent claim 25.

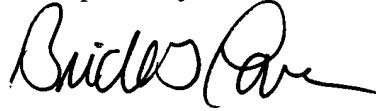
Accordingly, each of claims 25-29 complies with the written description requirement of 35 U.S.C. § 112, first paragraph, and is, therefore, in condition for allowance under the first paragraph of section 112.

Withdrawal of the 35 U.S.C. § 112, first paragraph, rejection of claims 25-29 is, therefore, respectfully requested, as is the allowance of claims 25-29.

**CONCLUSION**

It is respectfully submitted that each of claims 25-29 is allowable. An early notice of the allowability of each of these claims is respectfully solicited, as is an indication that the referenced application has been passed for issuance. If any issues preventing the allowance of any of claims 25-29 remain which might be resolved by way of a telephone conference, the Office is kindly invited to contact the undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brick G. Power", with a stylized, flowing script.

Brick G. Power  
Registration No. 38,581  
Attorney for Applicants  
TRASKBRITT, PC  
P.O. Box 2550  
Salt Lake City, Utah 84110-2550  
Telephone: 801-532-1922

Date: July 7, 2004

BGP/rmh  
Document in ProLaw